June 6, 2001

Brian Baird, Ocean Program Manager
Resources Agency of California
1416 Ninth Street, Suite 1311
Sacramento, CA 98514

RE: Comments on Draft Policy on Coastal Erosion Planning and Response and Background Material.

Dear Mr. Baird,

Our firm has had extensive experience in designing protective "structures" for mitigating both erosion induced and load-induced failures of shoreline bluffs. A significant portion of the California coastline is composed of relatively steep bluffs with marginal beaches. During extreme weather conditions, bluffs routinely experience failures in the form of both erosional action by waves and landsides induced principally by saturated ground conditions or slope undermining by waves. Beaches routinely build and recede as current and wave action fluctuates.

While traditional vertical seawalls and similar structures degrade visual shoreline quality, impede beach access, and may degrade the environment for shoreline and beach habitats, there are numerous design techniques which can eliminate these adverse impacts. Techniques integrating existing bluff shapes, textures, and visual appearance (color) have been successfully applied to stabilize bluffs for extended periods of time. By relegating this option to the "last resort" in the proposed policy, the most effective and environmentally beneficial option for a given receding bluff problem may be rejected. Typically these techniques are more effective if properly applied in saving coastline than the higher priority options proposed by the policy. For such structural stabilization options to be long lasting and environmentally beneficial, the cost often is high. Coastal properties have in general, increased in value to justify the expenditure of significant funds to protect or save such residential structures. When property owners, private or public can justify the expense of protecting the bluffs that such structures occupy, such stabilization effort often will provide secondary benefit to adjacent coastal bluffs and beaches. Furthermore, integrated stabilization of multiple properties should be encouraged so as to achieve a consistent environmental benefit, as well as a regional as opposed to a localized benefit.

The sand comes and goes, but the bluffs are not replaceable once they have fallen. Often structures worth saving are forced into abandonment resulting in subsequent encroachment on public structures such as California Highway 1. By encouraging the private sector to pursue reliable long-term protection, often such public infrastructures are protected. Rather than proclaimate the technique for saving the coast, the policy should encourage and reward innovative techniques that preserve the natural appearance, protect the environment and maintain or improve beach access while protecting structures on a long-term basis.

The current review process by various agencies such as the Coastal Commission already addresses these concerns. The policy should encourage such agencies to work closely but "productively" with design firms tasked with stabilizing coastal bluffs. The high cost of designing and installing environmentally beneficial stabilization techniques should be rewarded by providing encouragement and assistance through the permitting process. These types of innovative approaches benefit everyone in the long run.

By creating a positive permitting environment, property owners are less likely to install home brewed clandestinely constructed seawalls or similar structures which ultimately fail and are or can be an eyesore and an impediment to beach access both while standing and after they have ultimately failed due to inadequate structural or geotechnical design.

Specific concerns are directed to page ii paragraph 5 "Historic Trends" line 11 " of development is not sited in areas of high erosion hazard". The determination of these areas and the definition of "high" hazard are very questionable. As stated in the policy – the rate of coastal erosion varies with long-term weather patterns. Is there sufficient data to define the equivalent of the 100-year flood plain for rivers? The total cost of $100 million in 1982-83 while significant, is very small in comparison to the use revenue of over $10 billion acknowledged in this section.

On page iii paragraph 4 "minimizing hazards" how does prioritizing hazard avoidance and relocation actively promote mitigation of coastal erosion? Quite to the contrary, coastal protection should be the priority providing it does not impede access or degrade the environment as this proactive approach saves coastline.

Page iii, paragraph 6 – Why does the resource agency not place value in considering cost effective solutions? The lowest cost option that addresses all other concerns should be acceptable.

Page iii, paragraph 7 – Regarding coastal protection strategies, you acknowledge that relocation and hazard avoidance "do not address beach loss"

Page iv, paragraph 1 – separating protection into "soft" and "hard" categories represents narrow thinking. The efforts of a "hard" remediation strategy can in fact result in beach restoration. Each design needs to be evaluated based on its own merit and circumstances. Your statement that "any accumulation of sand produced by a device is at the expense of an adjacent section of the shore is not always true. Again each design has to be evaluated based on its own merit.

Page iii, paragraph 2 – "Constructing a hard protection is historically the most common approach" Why, because it works better that other approaches.

Page iii, paragraph 3 gets to the heart of the issue. "Hard" structures should not be bond. This design should address and mitigate the issues raised here namely 1. Public access 2. Impact on adjacent properties, 3. Disruption of the visual character of the coast. You should add and additional issue, 4. protection of habitat. You should eliminate "restricted sand input from armored bluffs". This contribution is insignificant in comparison to river-transported sediments. Furthermore coastal erosion has been present for a millennium prior to the existence of protective measures.

Page iv paragraph 3 – "Protective devices and construction without proper engineering or materials ... lead to eventual failure... create nuisance". This is all true and could be avoided if reasonable permitting and engineer and geologic review policies were in place to avoid forcing homeowners to resort to such illegal or makeshift activities.

Page iv paragraph 4 " They must be designed to eliminate impacts on local shoreline sand supply" this demand appears to be a hidden method of allowing regulators to refuse a home or business owner a permit by asking for "calculations" that are not reasonable achievable.

Page iv, paragraph 3-6 – The nature of the language and method of comparing pros and cons for "hard" verses "soft" protection creates a bias in evaluating these options. Each design should be evaluated for all

relevant impacts regardless of its "hard" or "soft" nature. In addition, cost and durability should always be factored into the analysis.

In summary it is clear that the agenda of the proposed policy is not to slow or mitigate coastal erosion, it is to remove privately held coastline and coastal zone close to the coastline from development. While this is a fine objective when pursued legitimately through fair land acquisition, it has no place in a policy labeled "Coastal Erosion Policy" for protecting the coastal resource. The policy is extremely contradicting in that it promotes no protective action and implies that by allowing bluffs to erode freely the beaches will be replenished.

Specific sections of the policy that should be restated include page 1, paragraph 1 – delete or restate, "restoring California Coastline"

The principals, pages 2 and 3 A,C,D are reasonable; B,E,F should be rewritten. B appears to encroach on private property owner rights by imposing unreasonable demands to demonstrate the necessity of their right to quiet enjoyment of their property. I believe this is a breach of constitutional rights. E is unrealistic. While beach loss may be "unacceptable" to some regulating body, restoration may not be possible. F development should not be avoided "whenever possible" but rather when its negative impacts out way its positive impacts. F1 is a reasonable if the 1st sentence is eliminated, no option should out way another except on its own merit. Forcing people to give up their ocean front property without due compensation is illegal.

If a property owner develops a technically sound option, which does not negatively impact the coastline, they have every right to pursue it. Under the planning section page 3 and 4, B1 and B2 are contrary to sediment mitigation laws being imposed for construction sites and other inland developments. D1 is a moving target; define "present". Often a mitigation plan is developed as a result of a significant erosional event. The "present" MHTL should be the MHTL prior to the erosion event or perhaps at the time of purchase or original development. E is a sound principal and could be equitably applied.

Section III pages 5 and 6 – B1 is bias. There is no reason to preclude selecting a rigid structure if is a better solution than a "feasible" soft" solution if based on all factors including environmental, public access, appearance, cost and durability it is a better solution. B4, why would you wait for a structure to be at "imminent risk" before designing a solution? This requirement may lead to hasty designs and excessive costs due to the short amount of time available or adverse weather conditions that must be factored in by a remediation contractor. Furthermore why wait to stabilize a section of coastline after unnecessary shoreline loss has occurred if the owner is willing to be proactive?

Respectfully Submitted,

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